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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/036,591 | 11/07/2001 | Ran J. Flam | sparta01.005 | 4352 |

25247 7590 11/14/2006

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EXAMINER

STEVENS, ROBERT

ART UNIT PAPER NUMBER

2162

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/036,591 | FLAM, RAN J. | |
| | Examiner | Art Unit | |
| | Robert Stevens | 2162 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Office withdraws the previous rejections of the claims under 35 U.S.C. §103(a), in light of the amendment. However, the Office has set forth new rejections under 35 U.S.C. §§101 and 103(a), in light of the amendment.

Response to Arguments

2. No new arguments were submitted with the RCE. The previous arguments are moot in light of the new rejections.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/16/2006 has been entered.

5. Claim 9 is objected to because of the following informalities: The word "thereof" in line 3 is misspelled. Appropriate correction is required.

6. Claim 16 is objected to because of the following informalities: The word "value" in line 10 is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. **Claims 1-19 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter.

To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application with useful, concrete and tangible result.

A practical application can be either physical transformation or a useful, concrete and tangible result.

Independent claim 1 is directed to software per se (i.e., software systems). The claim lacks the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. It is clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, the claim fails to fall within a statutory category, and is, at best, functional descriptive material *per se* (i.e., functional descriptive material that is not tangibly embodied). The two recitations of "memory device" in the preamble are not positive recitations, and are thus given no weight in determining whether the claim is statutory under 35 USC §101. The Office interprets the "memory device" of lines 3-4 as memory for storing records that are accessed by the graphical user interface (GUI), and the "system" to which the GUI belongs (in line 3) as a software system.

Claims 2-16 and 18-19 depend upon claim 1, and do not correct the deficiencies of that claim. These claims are likewise rejected.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1-16 and 18-19 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Marlin et al. (US Patent No. 5,778,377 filed Nov. 4, 1994 and issued Jul. 7, 1998, hereafter referred to as "Marlin") view of Akifuji et al. (US Patent No. 6,853,974 filed Aug. 29, 1999 and issued Feb. 8, 2005, hereafter referred to as "Akifuji").

Regarding independent claim 1: Marlin teaches ***A graphical user interface (GUI) for specifying an action which modifies a value of a record field that is common to records belong to a set thereof stored in a memory device, the graphical user interface belonging to a system which has access to the memory device, executes queries which return records belonging to the set, and generates and responds to the graphical user interface,*** (See Marlin Abstract, discussing a graphical user interface [GUI] for database manipulations.) ***and the graphical user interface comprising: a window in the graphical user interface, the window displaying a table wherein the record field whose value is to be modified by the action has an entry that is selectable by a user of the graphical user interface,*** (See Marlin col. 15 lines 45-56, discussing a view table of records within a window, col. 16 lines 44-56, describing a "GET" action, and col. 15 lines 45-56, discussing arrangement based upon an action flag.) ***the entry including and one or more action fields of the entry that, when the user has selected the entry, the user may set to specify the action, the system responding to the identified record field and the specified action when the system executes a query that is associated***

with the action and returns a record that belongs to the set by modifying the value in the record field in the returned record that is identified by the entry's first field as specified in the one or more action fields of the entry. (See Marlin col. 16 lines 44-50, discussing a "SET" action to modify an attribute field and col. 15 lines 45-56, discussing arrangement based upon an action flag.)

However, Marlin does not explicitly teach the limitations as claimed. Akifuji, though, discloses ***a first field of the entry that identifies the record field to be modified by the action;*** (See Akifuji col. 4 lines 52-57, discussing an action/division table for records.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Akifuji for the benefit of Marlin, because to do so would have enabled a system designer to implement a workflow management system without modifying existing applications, as taught by Akifuji in the col. 6 lines 59-65. These references were all applicable to the same field of endeavor, i.e., database operations.

Regarding claim 2: Marlin does not explicitly teach the remaining limitations as claimed. Akifuji, though, discloses ***wherein the values of the record field identified by the entry's first field belong to one of a plurality of types; and the entry's action fields are determined by the type of the identified field's values.*** (See Akifuji col. 5 lines 52-57, discussing a corresponding business identification number including a plurality of attribute types and an associated action name.)

Regarding claim 3: Marlin does not explicitly teach the remaining limitations as claimed. Akifuji, though, discloses *wherein the plurality of types include types whose values belong to ordered sets that are defined in the system to which the graphical user interface belongs, types whose values specify times, and types whose values specify persons.* (See Akifuji col. 4 lines 552-62, discussing a record format corresponding to a set of division node types, col. 11 lines 39-50 discussing a "person in charge", and col. 12 lines 5-10, discussing a "start of estimation" time.)

Regarding claim 4: Marlin teaches *wherein the user may set the entry's action fields to specify that the record field in the returned record that is identified by the entry's first field be cleared.* (See Marlin col. 16 lines 51-53, discussing the clearing of fields.)

Regarding claim 5: Marlin teaches *wherein the user may set the entry's action fields to specify a value and to specify that the value be assigned to the record field in the returned record that is identified by the entry's first field.* (See Marlin col. 16 lines 44-50, discussing the setting of record fields.)

Regarding claim 6: Marlin teaches *wherein when the entry is selected, the user may set the entry's action fields to specify an operation by which a new value for the record field identified by the entry's first field may be computed from a current value which is the identified record field's value in the returned*

record when the returned record is returned by the query execution. (See Marlin col. 16 lines 44-50, discussing the getting and setting of record fields.)

Regarding claim 7: Marlin does not explicitly teach the remaining limitations as claimed. Akifuji, though, discloses ***wherein the value of the record field identified by the entry's first field belongs to an ordered set of values;*** (See Akifuji col. 4 lines 52-62, discussing a table of records.) ***and the user may set the action fields to specify an increment operation wherein the new value that is assigned to the identified record field's value in the returned record is a value that follows the identified record field's current value in the ordered set of values.*** (See Marlin col. 16 lines 44-50, discussing the getting and setting of record fields, it having been an obvious variant to one skilled in the art at the time of the invention to increase a value by one.)

Regarding claim 8: Marlin does not explicitly teach the remaining limitations as claimed. Akifuji, though, discloses ***wherein the record field identified by the entry's first field may have a null value when the record is returned by the query execution; and the user may set the entry's action fields to specify an action that is to be performed when the identified record field in the returned record has the null value and/or an action that is to be performed when the identified record field in the returned record does not have the null value.*** (See Akifuji Fig. 3 #3040, showing a 1st entry value under the "start of estimation" column as NULL, col. 4 lines

52-57, discussing actions, and col. 10 lines 37-44, discussing rules triggered for entries.)

Regarding claim 9: Marlin does not explicitly teach the remaining limitations as claimed. Akifuji, though, discloses *wherein the user may set the entry's action fields to specify a reference field in the returned record which is another field that is common to records belonging to the set thereof and a reference field operation by which a new value in the returned record for the record field identified by the entry's first field may be computed from a current value of the returned record's reference field, the current value being the value that the returned record's reference field has when the returned record is returned by the query execution.* (See Akifuji col. 10 lines 27-44 discussing user execution and resource selection rules, and col. 10 lines 59-65 discussing record selection.)

Regarding claim 10: Marlin does not explicitly teach the remaining limitations as claimed. Akifuji, though, discloses *wherein the record field identified by the entry's first field in the returned record may have a null value when the record is returned by the query execution;* (See Akifuji Fig. 3 #3040, showing a 1st entry value under the "start of estimation" column as NULL.) *and the user may set the action fields to specify a first reference field and a first reference field operation that is to be performed when the identified record field in the returned record has the null value and/or a second reference field and a second reference field operation*

that is to be performed when the identified record field in the returned record does not have the null value. (See Akifuji col. 10 lines 27-44 discussing user execution and resource selection rules, and col. 10 lines 59-65 discussing record selection.)

Regarding claim 11: Marlin teaches ***wherein the reference field operation assigns the current value of the returned record's reference field to the identified record field in the returned record.*** (See Marlin col. 16 lines 44-50, discussing a "SET" action.)

Regarding claims 12-14: Marlin does not explicitly teach the remaining limitations as claimed. Akifuji, though, discloses the use of time values entered in a variety of ways. (See Akifuji Fig. 3 #3040 and #3060, showing start and completion times, and "entered values". It is noted that it was an obvious variant to one skilled in the art at the time of the invention as to the time units one used, as the conversion among seconds/hours/days/etc., was well known in the art at the time of the invention.)

Regarding claim 15: Marlin does not explicitly teach the remaining limitations as claimed. Akifuji, though, discloses ***wherein one of the reference fields is a field whose value is always set to the current time when the query execution returns the returned record.*** (See Akifuji Fig. 3 #3050, showing a "completion" time column.)

Regarding claim 16: Marlin does not explicitly teach the remaining limitations as claimed. Akifuji, though, discloses *wherein the identified record field has a person value; and the user may set the entry's action fields to specify a role reference field in the returned record from which a new person value for the record field identified by the entry's first field may be obtained, the role reference field being another field common to the record belonging to the set thereof, the role reference field referring to an ordered set of person values wherein one of the person values is a last-used person value, and the role reference field in the returned record obtaining being set to the next person value following the last-used person value at the time the returned record is returned by the query execution and the value of the identified record field in the returned record being set from the value of the role reference field in the returned record.* (See Akifuji col. 12 lines 20-26, discussing the selection of users performing a particular business process role.)

Regarding claim 18: Marlin does not explicitly teach the remaining limitations as claimed. Akifuji, though, discloses *wherein another action has been specified which assigns the person reference field a value from a role reference field; and when the returned record is returned by the query execution, actions which assign person fields values from role reference fields are performed prior to other actions.* (See Akifuji col. 12 lines 20-26, discussing the selection of users performing a particular business process role.)

Regarding claim 19: Marlin does not explicitly teach the remaining limitations as claimed. Akifuji, though, discloses ***wherein the user may further set the action fields to directly specify a person value, the identified record field in the returned record being set from the directly-specified person value when the returned record is returned by the query execution.*** (See Akifuji col. 12 lines 20-26, discussing the selection of users performing a particular business process role.)

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patents

| | |
|---------------------|-----------|
| Hoskins et al. | 6,268,853 |
| Leymann et al. | 6,415,297 |
| Du et al. | 6,078,982 |
| McNally et al. | 6,823,513 |
| Van Der Vegt et al. | 6,128,540 |
| Jarrett | 6,345,257 |
| Leymann et al. | 5,960,420 |

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Robert Stevens
Examiner
Art Unit 2162

November 8, 2006



MOHAMMAD ALI
PRIMARY EXAMINER